Rashed Al Fuhed NEWM-N 230 (24681) 12/10/2022

Since Midterm, I have added multiple aspects and interactions to the level. It took me a couple of hours to make the interactions alone. First, I struggled with the idea of which blueprint interaction or animation should I make that suits my level's environment. Then, I said to myself: "why not make a door that opens and closes using a specific key (e.g., F key)." Then I went ahead to work on that. This was, for me, the hardest part to make, harder than any other thing I made at my level. I went to watch a tutorial on youtube about how to make a working *double door*, and the tutorial was very helpful. The tutorial's name is "How to make working Double Doors | Unreal Engine" by Manim8. Of course, there were some mistakes in this tutorial but thankfully I figured it out. The other blueprint interaction/animation I added is turning on and off the *lights*. In the beginning, I didn't know how to turn on multiple lights rather than one in a single room without turning on the other lights in other rooms. So, I searched on google about how to fix this problem, and luckily, I found something. I found out that I could use a trigger box (Box Trigger). It works just like the trigger volume! So I went ahead and made a box for each room to control the *lights*, and it worked!

After finishing up the blueprints, I started working on particles. This is the most interesting part of this assignment. I learned a lot about particles and how amazing they are. I made two particles, the first one is *dust* particles. I learned about how to make dust particles in the notes, and I changed their color from white to dust color. They are hard to see but when you pay extra attention, you will see them on the second floor inside the building near the boxes. The second particle I made is *fireflies*, and they are located nearby the lake. For this one, it's similar to the dust particles, but with increased size and brighter color. I came up with this idea after playing the new God of War: Ragnarok game. In the Vanaheim realm, there are fireflies that look amazing at night, so that's why I added fireflies, I wanted to add that peaceful view to my world. If you focus on the fireflies near the ground and water, you will notice their light reflection in the ground. In order to make this light, just go to alpha over life and set Out val to 3.0 inside the Color over life emitter. I also changed the number of flies because I didn't want them to be in huge numbers. I tried as hard as I can to make them realistic, I even changed the overall light and time from day to night just to make a better view for the fireflies. I also added a vehicle on the right of the building from the spawn location. I was planning to make it movable or at least make the player be able to enter the vehicle, but unfortunately, it would take much more time and I don't have enough time for it because I have finals to prepare for these 2 weeks, so I just kept it there just as a decoration.

Finally, I made two destructible objects on the level. The boxes and windows are all destructible, and they all are inside the building. There's a sound for each window, and it's a self-made sound. I had troubles with my mom while making this sound:). There was some whooping and yelling because I broke a glass which she thought it was useless and unnecessary. I told her it was for my project. After a couple of minutes trying to explain and convince her, she finally forgives me! Eventually, it was worth it because the sound was a perfect addition to the level. The only issue is that it has only one sound and not a different sound each time you break a

window. I wanted to break another glass to make a different sound but I also didn't want to get whooped again: '). I'm so passionate about this class and it was my childhood dream to design and develop a game, and it came true all because of this class and Dr. Powers! All of the classes I'm taking this semester are so stressful, but this class is the only class that is a stress-relief (except the midterm part, but it was fun though). I really enjoyed this class and I wish there was a similar class but in Unreal Engine 5. Thank you, Dr. Powers, and I hope I can meet you in the future or during the commencement to thank you in-person and take a souvenir photo!